

ELEMENT SUMMARY INFORMATION

Element: 1.3.19 Lower Landing Minimums

Purpose of this Element (Air Carrier's responsibility): To provide standards for personnel, equipment, and maintenance of aircraft authorized for the Lower Landing Minimums (LLM) program.

Objective (FAA responsibility): To determine if the Air Carrier follows its policies, procedures and controls for the Lower Landing Minimums program.

Inputs:

- Make, Model, and Series of Aircraft
- Flight Management System (FMS)
- Operations Specifications Requirements

Outputs:

• Aircraft capable and authorized for Category I, II, or III landings

Performance Measures:

- The Air Carrier complies with the provisions of Operations Specifications.
- The Air Carrier's LLM Maintenance Document meets or exceeds the standards contained in AC 120-28C and AC 120-29.
- The Air Carrier has maintenance accomplished in accordance with the standards of the LLM Maintenance Document.
- The Air Carrier makes the LLM Maintenance Document available for use by the person(s) performing the LLM maintenance.
- The Air Carrier immediately notifies the CHDO of any system failures or abnormalities as specified in AC 120-28C, Paragraph 14.

SRR:

- 91.189 (g) Instrument Flight Rules, Category II and III
- 91.191 Category II Manual
- 91.205 Equipment, Instrument, and Certification Requirements
- 121.375 Maintenance and Preventive Maintenance Training Program

Other CFRs and/or FAA Guidance:

- FAA Order 8300.10, Vol. 2, Chapt 3 "Evaluate Category I/II/III/IIIA Landing Minimum Maintenance/Inspection Programs"
- FAA Order 8300.10, Vol. 2, Chapt 238 "Evaluate Airborne Microwave Landing Systems"
- Refer to appropriate Advisory Circulars

SRR SPECIFIC INFORMATION

SRR	Intent	
91.189(g)	The Air Carrier is prohibited from operating	Certification: Avionics
	Cat II and Cat III unless they have Operations	Surveillance: Avionics
	Specifications authorizing them and that they operate in accordance with those	
	specifications.	
91.191	TBD	Certification: Avionics
		Surveillance: Avionics
91.205	TBD	Certification: Avionics
		Surveillance: Avionics
121.375	To provide a requirement for the Air Carrier	Certification: Avionics
	or its maintenance providers to develop	Surveillance: Avionics
	training program for maintenance and	
	inspection personnel.	

1.3.19 Lower Landing Minimums			
SECTION 1 - RESPONSIBILITY ATTRIBUTE			
Objective: To determine if there is a clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of the LLM process.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Identify the person who is responsible for the quality of the Lower Land	ding Minimums process.		
2. Review the description in the Manual that delineates the duties and resp	consibilities of the person.		
3. Evaluate the person's qualifications and work experience (or resume', in	f appropriate).		
4. Review the appropriate organizational chart.			
5. Discuss the Lower Landing Minimums process with the person.			
To meet this objective, the inspector will determine and record answers to	the following questions:		
1. Is there a clearly identifiable person who is answerable for the quality of the Lower Landing Minimums process?	YES If yes, provide the name: No If no, explain:		
2. Does the person understand the procedures associated with the Lower Landing Minimums process?	☐ YES If no, explain: ☐ NO		
3. Does the person understand the controls associated with the Lower Landing Minimums process?	YES If no, explain:		
4. Does the person understand the interfaces associated with the Lower Landing Minimums process?	YES If no, explain:		
5. Does the person understand the process measurements associated with the Lower Landing Minimums process?	YES If no, explain:		
6. Is the responsibility of this position clearly documented in the air carrier's Manual(s)?	YES If no, explain:		
7. Are the qualification standards for this position clearly documented?	YES If no, explain:		
7a Are the qualification standards for this position appropriate for the duties that are assigned?	YES If no, explain:		
8. Does the person meet the qualification standards?	YES If no, explain:		
9. Does the person acknowledge that he/she has responsibility for the Lower Landing Minimums process?	YES If no, explain:		
10. Does the person know who has authority to establish and modify the Lower Landing Minimums process?	YES If no, explain:		

1.3.19 Lower Landing Minimums			
SECTION 2 – AUTHORITY ATTRIBUTE			
Objective: To determine if there is a clearly identifiable, qualified, and knowledgeable person with the authority to establish and modify the LLM process.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Identify the person who has the authority to establish or modify the Lo process.	wer Landing Minimums		
2. Review the description in the Manual that delineates the duties and res	ponsibilities of the person.		
3. Evaluate the person's qualifications and work experience (or resume',	if appropriate).		
4. Review the appropriate organizational chart.			
5. Discuss the Lower Landing Minimums process with the person.			
To meet this objective, the inspector will determine and record answers to	the following questions:		
1. Is there a clearly identifiable person who has authority to establish and modify the air carrier's policies for the Lower Landing Minimums process?	YES If yes, provide the name: No If no, explain:		
Does the person understand the procedures associated with the Lower Landing Minimums process?	YES If no, explain:		
3. Does the person understand the controls associated with the Lower Landing Minimums process?	YES If no, explain:		
4. Does the person understand the interfaces associated with the Lower Landing Minimums process?	YES If no, explain:		
5. Does the person understand the process measurements associated with the Lower Landing Minimums process?	YES If no, explain:		
6. Is the authority of this position clearly documented in the air carrier's Manual(s)?	YES If no, explain:		
7. Are the qualification standards for this position clearly documented?	YES If no, explain:		
7a Are the qualification standards for this position appropriate for the duties that are assigned?	YES If no, explain:		
8. Does the person meet the qualification standards?	YES If no, explain:		
9. Does the person acknowledge that he/she has authority for the Lower Landing Minimums process?	YES If no, explain:		
10. Does the individual know who has the responsibility for the Lower Landing Minimums process?	YES If no, explain:		
11. Are the procedures for delegation of authority clearly documented for the Lower Landing Minimums process?	YES If no, explain:		

1.3.19 Lower Landing Minimums			
SECTION 3 – PROCEDURES ATTRIBUTE			
Objective: To determine if the air carrier has documented procedures for accomplishing the LLM process.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Review the documented instructions and information related to the L process to ensure that they contain who, what, where, when, and how	7.		
2. Review the FAA Guidance and Specific Regulatory Requirements (S supplemental information section of this SAI.	SRR)	includ	ded in the
3. Discuss the Lower Landing Minimums process with appropriate persof the procedures.	sonne	el to ga	ain an understanding
4. Observe the Lower Landing Minimums process to gain an understand	ding	of the	procedures.
To meet this objective, the inspector will determine and record answers to	to the	e follo	wing questions:
1. Do written procedures exist to achieve the desired result of the Lowe	r Lar	nding	Minimums process:
1.1 Do written procedures require maintenance personnel to use the instructions and information contained in the LLM Maintenance Document?		YES NO N/A	If no or N/A, explain:
1.2 Do written procedures detail maintenance action to be taken when system failures or abnormalities required flight crew intervention on approach?		YES NO N/A	If no or N/A, explain:
1.3 Do written procedures require the Air Carrier to use a an LLM curriculum to train persons who perform LLM maintenance?[SRR 121.375]		YES NO N/A	If no or N/A, explain:
1.4 Do written procedures require maintenance to notify the flight crew when an aircraft is determined to be non-LLM capable for dispatch?		YES NO N/A	If no or N/A, explain:
1.5 Do written procedures provide detailed instructions and information for persons performing LLM maintenance?		YES NO N/A	If no or N/A, explain:
1.6 Do written procedures provide a method for notifying the CHDO immediately following any failure or abnormality as described in AC 120-28C, Paragraph 14?		YES NO N/A	If no or N/A, explain:
1.7 Do written procedures require distinguishing of Category II and III parts from standard aircraft parts?		YES NO N/A	If no or N/A, explain:
2. Do the procedures identify: who, what, where, when and how?		YES No	If no, explain:
3. Are the procedures in compliance with the CFR(s)?		YES	If no, explain:

1.3.19 Lower Landing Minimums			
SECTION 3 – PROCEDURES ATTRIBUTE			
4. Do the procedures conform to other written guidance (E.g., Operations Specifications, FAA Orders, Airworthiness Directives,	☐ YES If no, explain: ☐ NO		
Advisory Circulars, Handbook Bulletins, Directives, and Manufacturer's Recommendations)?			
5. Does the air carrier have the resources to support the written procedures for the Lower Landing Minimums process?	☐ YES If no, explain: ☐ NO		
6. If alternate procedures exist for use during irregular conditions, do they achieve the same desired results as the primary procedures so	☐ YES If no, explain: ☐ NO		
that an equivalent level of safety is maintained? (E.g., a manual system used as a result of equipment failure).	N/A, No alternate procedures exist for this element		
7. Are the procedures published in different manuals relating to the Lower Landing Minimums process consistent?	☐ YES If no, explain: ☐ NO		
8. Does the air carrier have a documented method for assessing the impacts of procedural changes to the Lower Landing Minimums process?	☐ YES If no, explain: ☐ NO		

1.3.19 Lower Landing Minimums	
SECTION 4 – CONTROL ATTRIBUTE	
Objective: To determine if checks and restraints are designed into the Li result is achieved.	LM process to ensure a desired
To meet this objective, the inspector will accomplish the following tasks:	
Review the documented instructions and information related to the L process.	ower Landing Minimums
2. Review the FAA Guidance and Specific Regulatory Requirements (S supplemental information section of this SAI	SRR) included in the
3. Discuss the Lower Landing Minimums process with appropriate persof the controls.	sonnel to gain an understanding
4. Observe the Lower Landing Minimums process to gain an understan	ding of the controls.
To meet this objective, the inspector will determine and record answers	to the following questions:
1. Are the following checks and restraints built into the Lower Landing	Minimums process:
1.1 Does the Air Carrier have and maintain a LLM Maintenance Document that meets or exceeds the standards contained in AC 120-28C and AC 120-29?	YES If no or N/A, explain: NO N/A
1.2 Does the Air Carrier have and maintain a method for tracking LLM systems errors?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A
1.3 Does the Air Carrier perform an Autoland System Periodic Check of each LLM aircraft in accordance with the manufacturer's recommendation or at an interval approved by the FAA?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A
1.4 Does the Air Carrier have and maintain a training curriculum for LLM? [SRR 121.375]	☐ YES If no or N/A, explain: ☐ NO ☐ N/A
2. Do the checks and restraints ensure the desired result is achieved for the Lower Landing Minimums process?	☐ YES If no, explain: ☐ NO
3. Does the air carrier have a documented method for assessing the impacts of any changes made to checks and restraints in the Lower Landing Minimums process?	☐ YES If no, explain: ☐ NO
4. Does the air carrier have the resources to support the checks and restraints for the Lower Landing Minimums process?	YES If no, explain: No

1.3.19 Lower Landing Minimums			
SECTION 5 - PROCESS MEASUREMENT ATTRIBUTE			
Objective: To determine if the air carrier measures and assesses the LLM process, to identify and correct problems or potential problems.			
To meet this objective, the inspector will accomplish the following tasks	s:		
1. Review the documented instructions and information related to the process.	Lower Landing Minimums		
2. Discuss the Lower Landing Minimums process with appropriate per of the process measures.	rsonnel to gain an understanding		
3. Observe the Lower Landing Minimums process to gain an understa	nding of the process measures.		
To meet this objective, the inspector will determine and record answers	s to the following questions:		
1. <deleted></deleted>			
2. Does the air carrier's Lower Landing Minimums process include the measurements?	e following process		
2.1 The Air Carrier audits the LLM process to ensure that it complies with the Operations Specifications. [SRR 91.189(g)]	YES If no or N/A, explain: NO N/A		
2.2 The Air Carrier audits the LLM process to ensure that maintenance personnel are using the LLM Maintenance Document.	YES If no or N/A, explain: NO N/A		
2.3 The Air Carrier audits the LLM Maintenance Document to ensure that it meets or exceeds the standards included in AC 120-28C and AC 120-29.	YES If no or N/A, explain: NO N/A		
3. Does the air carrier document their process measurement methods and results?	YES If no, explain:		
4. Are the air carrier's process measurement methods effective?	YES If no, explain:		
5. Does the air carrier use their process measurement results to improve their programs?	YES If no, explain:		
6. Are the process measurement results accessible to the FAA?	YES If no, explain:		
7. Does the organization that conducts the process measurement have direct access to the person with responsibility for the Lower Landing Minimums process?	YES If no, explain:		
8. Does the air carrier have the resources to support the process measurement for the Lower Landing Minimums process?	YES If no, explain:		

1.3.19 Lower Landing Minimums			
SECTION 6 – INTERFACES ATTRIBUTE			
Objective: To determine if the air carrier identifies and manages the interactions between the LLM process and the other element processes within the air carrier organization.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Review the documented instructions and information related to the L process.	ower Land	ding Minimums	
2. Discuss the Lower Landing Minimums process with appropriate persof the interfaces.	sonnel to g	gain an understanding	
3. Observe the Lower Landing Minimums process to gain an understand	ding of the	e interfaces.	
To meet this objective, the inspector will determine and record answers a	to the follo	owing questions:	
1. Are the following interfaces identified for the Lower Landing Minim	ums proce	ess:	
1.1 Appropriate Operational Equipment (Element 1.1.2)	YES NO N/A	If no or N/A, explain:	
1.2 Airworthiness Release or Log Book Entry (Element 1.2.1)	YES NO N/A	If no or N/A, explain:	
1.3 Major Repairs and Alterations (Element 1.2.2)	YES NO N/A	If no or N/A, explain:	
1.4 Maintenance Log/Recording Requirements (Element 1.2.3)	YES NO N/A	If no or N/A, explain:	
1.5 Maintenance Program (Element 1.3.1)	YES NO N/A	If no or N/A, explain:	
1.6 Inspection Program (Element 1.3.2)	YES NO N/A	If no or N/A, explain:	
1.7 MEL/CDL/Deferred Maintenance (Element 1.3.5)	☐ YES ☐ NO ☐ N/A	If no or N/A, explain:	
1.8 Outsource Organization (Element 1.3.7)	☐ YES ☐ NO ☐ N/A	If no or N/A, explain:	
1.9 Control of Calibrated Tools and Test Equipment (Element 1.3.8)	YES NO N/A	If no or N/A, explain:	

1.3.19 Lower Landing Minimums		
SECTION 6 – INTERFACES ATTRIBUTE		
1.10 Parts/Material Control/SUP (Element 1.3.10)	☐ YES	If no or N/A, explain:
	□ NO N/A	
1.11 Continuous Analysis and Surveillance (CAS) (Element	YES	If no or N/A, explain:
1.3.11)	□ No	, ,
1.12 CMM/Equivalent (Floregart 1.2.14)	N/A	
1.12 GMM/Equivalent (Element 1.3.14)	YES NO	If no or N/A, explain:
	NO N/A	
1.13 Other Programs Approved by Operations Specifications	☐ YES	If no or N/A, explain:
	□ No	
1.14 Content Consistency Across Manuals (Element 2.1.2)	☐ N/A ☐ YES	If no or N/A, explain:
1.17 Comen Consistency 110. 000 1120	□ No	II IIU UI 14/24, CAPIAIII.
	□ N/A	
1.15 Airman Duties/Flight Deck Procedures (Element 3.1.3)	☐ YES	If no or N/A, explain:
	□ NO □ N/A	
1.16 Maintenance Training Program (Element 4.2.1)	U YES	If no or N/A, explain:
	□ No	
1 17 DII Tugining Doggingments (Flamont 1 2 2)	N/A	
1.17 RII Training Requirements (Element 4.2.2)	☐ YES ☐ NO	If no or N/A, explain:
	□ N/A	
1.18 Training of Crewmember (Element 4.2.3)	☐ YES	If no or N/A, explain:
	□ No	
1.19 Training of Dispatcher (Element 4.2.5)	☐ N/A YES	If no or N/A, explain:
	□ No	11 110 V1 111.2, V-1p-11
	N/A	
1.20 Outsource Crewmember Training (Element 4.2.9)	YES NO	If no or N/A, explain:
	NO N/A	
1.21 Director of Maintenance (Element 7.1.1)	☐ YES	If no or N/A, explain:
	□ No	
1.22 Chief Inspector (Element 7.1.2)	☐ N/A YES	If no or N/A, explain:
1.22 Chief Inspector (Element 7.1.2)	□ NO	ii no or N/A, expiam:
	□ N/A	

1.3	3.19 Lower Landing Minimums		
SI	ECTION 6 – INTERFACES ATTRIBUTE		
	1.23 Director of Safety (Element 7.1.3)	YES	If no or N/A, explain:
		☐ NO	
	1.28 Manual Currency (Element 2.1.1)	U YES	If no or N/A, explain:
		□ No	
	1.29 Content Consistency Across Manuals (Element 2.1.2)	N/A YES	If no or N/A, explain:
		□ No	11 110 01 1 11 11, enpini
	1.20 (Manuscrit) Distribution (Element 2.1.2)	□ N/A	
	1.30 (Manual) Distribution (Element 2.1.3)	☐ YES NO	If no or N/A, explain:
		□ N/A	
	1.31 (Manual) Availability (Element 2.1.4)	☐ YES	If no or N/A, explain:
		☐ NO N/A	
2.	List any additional interfaces identified:	I I IV/A	
	A 41 '44 1 C 41 C ' 11'		
3.	Are there written procedures for the use of air carrier personnel in the application of these interfaces?	☐ YES NO	If no, explain:
4.	Are there controls to ensure that interfaces occur?	☐ YES	If no, explain:
		□ No	
5.	Are the interfaces between the Lower Landing Minimums process and other processes treated consistently in the Manual(s)?	YES NO	If no, explain:
	and other processes treated consistently in the manual(s)?	☐ No	